

Kentucky Department of Education
Science Adoption 2008-2014

Provided by the Publisher	ISBN - 9780618888320		Publisher - McDougal Littell, a division of Houghton Mifflin Company		Provided by the Publisher
	McDougal Littell, Biology Kentucky Pupil Edition				
	Type - P1	Author - Nowicki, Stephan			
	Copyright - 2008	Edition - 1st	Readability - Fry 9.49		
	Course - Biology		Grade(s) - 9, 10, 11, 12		
	Teacher Edition ISBN if applicable		9780618888337		

Overall Recommendation:

☒ **Recommended as Basal**

Overall Strengths, Weaknesses, Comments:

This Biology text is a special "Kentucky" edition. Every section in the textbook is aligned with Kentucky standards. Each page has "Kentucky Standards-Based Assessment" with CATS-type assessments. The book is easy to read and has vivid photographs.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

☐ Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 7 Big Ideas of science to the following extent:

- | | | | | |
|---|--|-----------------------------------|---------------------------------|---|
| a) Structure and Transformation of Matter | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| b) Motion and Forces | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |
| c) The Earth and the Universe | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |
| d) Unity and Diversity | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| e) Biological Change | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| f) Energy Transformation | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| g) Interdependence | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |

2) Addresses content-specific enduring understandings from the related Program of Studies standards.

☒ Strong ☐ Moderate ☐ Little ☐ N/A

3) Addresses content-specific skills and concepts from

☒ Strong ☐ Moderate ☐ Little ☐ N/A

the related Program of Studies standards.

4) Content addressed is current, relevant and non-trivial ☒ Strong ☐ Moderate ☐ Little ☐ N/A

5) Provides opportunities for critical thinking/reasoning ☒ Strong ☐ Moderate ☐ Little ☐ N/A

6) Strengths, Weaknesses, Comments:

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

a) Chapter 2 Cell chemistry chapter and periodic table. No boiling point, but appropriate for biochemistry. f) Does not contain wave behavior or nuclear reactions, but discusses energy as appropriate to biochemistry. Every section has critical thinking questions, labeled as synthesis, analysis, etc... Every chapter has "Kentucky Standards-Based Assessment" page.

B. Functionality & Suitability

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Suitability ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) Content quality ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community

3) Connections to Literacy

Note: may apply to either student or teacher editions

☒ Strong ☐ Moderate ☐ Little

- Employs a variety of reading levels and is grade/level appropriate
- Contains pre, during, post reading activities
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- Engaging text- does the text facilitate learning?
- Does understanding the text require having performed the imbedded activities?

4) Connections to Technology ☒ Strong ☐ Moderate ☐ Little

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- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data

5) Support for Diverse Learners

☒ Strong ☐ Moderate ☐ Little

- Provides support for ESL students
 - Provides support for differentiation of instruction in diverse classrooms
- Note: may apply only to teacher edition*

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Has activities for below-level readers and higher functioning students. Each chapter has key concepts, main ideas, vocabulary and review, assessment questions. The end of every chapter has an interactive review. On-line links are provided to see animated science illustrations. Webquests are included in the book and on the website. Data analysis is provided online.

C. Supports Inquiry and Skill Development

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Promotes Inquiry, research and Application of Learning

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities for inquiry and research that includes activities such as self-selecting topics, formulating authentic questions, gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions.
 - Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.)
 - Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
 - Provides opportunities for application of learned concepts.
 - Uses a variety of relevant charts, graphs, diagrams, time lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
 - Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.
- Note: may apply to either teacher or student edition*

2) Skill Development

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities to make sense of data
 - Provides opportunities for critical thinking and reasoning (analyze arguments, distinguish fact/opinion, recognize bias)
 - Provides opportunities to examine a range of types of evidence
 - Contains embedded activities (or extensions) that emphasize use of technology for problem solving
- Note: may apply to either teacher or student edition*

3) Strengths, Weaknesses, Comments:

Design your own investigation, p. 684. Each chapter begins with an open-ended question and attention-grabbing, vivid, relevant photograph. Investigations in the student text that require inquiry and student application skills. At classzone.com, there are virtual labs, animated biology and webquest that support inquiry and learning.

D. Supports Best Practices of Teaching and Learning

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Engages Students

☒ Strong ☐ Moderate ☐ Little

- Includes content geared to the needs, interests, and abilities of students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

☒ Strong ☐ Moderate ☐ Little

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

Engaging text with a variety of strategies and materials to enhance learning. Teacher's Edition has "Activate Prior Knowledge". Each chapter provides multiple assessment methods, including "interactive review", chapter assessment, "Kentucky standards-based assessment", "critical thinking", analyze a diagram, open-ended questions.

E. Has an Organization/ Format that Supports Learning and Teaching

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Organizational Quality

☒ Strong ☐ Moderate ☐ Little

- Print and/or electronic materials present minimal barriers to learners
- Presents chapters/lessons in an organized and logical sequence

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- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components) as either student or teacher resources
- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
- Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
- Uses grade-appropriate type size

Included media are durable, easy to use and have technical merit

- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

☐ Strong ☐ Moderate ☒ Little

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Vocabulary words in bold and yellow highlight. Interesting graphics and photos are throughout the book. Kentucky standards identified in each section. Attention-grabbing photos at the beginning of each chapter. Extensive use of SEM and TEM photographs in text. 2) no essential components beyond the 2 texts.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

There is an online version of the Pupil Edition and a Spanish version. Also, an Assessment Book.